

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-3, 5, and 6 are presently active in this case, Claims 1 and 3 having been amended, Claim 4 having been canceled without prejudice or disclaimer, and Claim 6 having been added by way of the present Amendment.

The specification has been amended to Change first etch stop layer and second etch stop layer in order to be consistent with the language present in the original claims. Additionally, the claims have been amended with respect to the first and second compound semiconductor layers to correspond to the written description and drawings. No new matter has been entered.

In the outstanding Official Action, Claims 1-5 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, the Official Action indicates that Claims 1 and 3 are incomplete for omitting essential steps. Regarding Claim 1, the Applicants note that a method is claimed in which one of the steps includes the forming of a semiconductor laser device including the first etch stop layer and the first and second compound semiconductor layers. The Applicants submit that a broad number of processes can be used to form such a device, as would be readily apparent to one of ordinary skill in the art based upon the teachings of the present invention. The Applicants submit that the claim need not recite one specific process used to form the semiconductor laser device including the layers defined in the claims. Such a recitation would unduly restrict the scope of the claimed invention. The Applicants note that the "[b]readth of a claim is not to be

equated with indefiniteness.” (MPEP 2173.04.) The Applicants submit that the scope of the subject matter embraced by the claims is clear, and thus the claims comply with the requirements of 35 U.S.C. 112, second paragraph. The same argument is true for Claim 3. Additionally, with regard to Claim 3, the Applicants note that Claim 3 is a product-by-process claim. Thus, the assertion that Claim 3 does not further limit Claim 1 is not on point, since Claim 3 in fact recites a semiconductor laser device, while Claim 1 recites a method. Thus, Claims 1 and 3 differ in scope and are definite under 35 U.S.C. 112, second paragraph. Accordingly, the Applicants request the withdrawal of the indefiniteness rejections.

Claims 1, 3, and 4 were rejected under 35 U.S.C. 102(b) as being anticipated by Mushiage et al. (U.S. Patent No. 5,933,443). Claims 1-3 were rejected under 35 U.S.C. 102(e) as being anticipated by Horie et al. (U.S. Patent No. 6,172,998). Claims 1 and 5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Mushiage et al. in view of Horie et al. For the reasons discussed below, the Applicants request the withdrawal of the art rejections.

The subject matter of Claim 4 has been incorporated into independent Claims 1 and 3, and thus the Applicants submit that the sole rejection that remains relevant to the pending claims is the anticipation rejection based upon the Mushiage et al. reference. The Applicants submit that the Mushiage et al. reference

Claim 1 recites a method comprising the steps of consecutively depositing a first etch stop layer, a second compound semiconductor layer and a first compound semiconductor layer overlying a semiconductor substrate. The first etch stop layer contains at least phosphorus, the first compound semiconductor layer contains at least aluminum, and the second compound semiconductor layer contains neither of aluminum nor phosphorus. Claim

3 recites a semiconductor laser device fabricated by the method as defined in claim 1. The Mushiage et al. reference does not disclose all of the features of the present invention recited in Claims 1 and 3.

By way of illustration and not limitation, the present application describes an embodiment including the consecutive depositing of a first etch stop layer (30), a second compound semiconductor layer (52), and a first compound semiconductor layer (32). In this embodiment, the first etch stop layer (30) is an InGaP layer, the second compound semiconductor layer (52) is a GaAs layer, and the first compound semiconductor layer (32) is an AlGaAs layer. Such a configuration is not described in the cited art.

The Mushiage et al. reference describes a semiconductor laser (depicted in Figure 4) having an etch stop layer (45) composed of GaInP, a shutting in layer (46) composed of AlInP, and a current blocking layer (47) composed of GaAs that are laminated in order on substrate (41). Such a configuration is contrary to the teachings of the present invention as recited in Claims 1 and 3, where a first etch stop layer containing at least phosphorous is deposited, then a second compound semiconductor layer containing neither aluminum nor phosphorus is deposited, and then a first compound semiconductor layer containing at least aluminum is deposited. For example, layer (46) of the Mushiage et al. reference contains phosphorus, which is contrary to the recited second compound semiconductor layer of Claims 1 and 3. Additionally, layer (47) of the Mushiage et al. reference does not contain aluminum, which is contrary to the recited first compound semiconductor layer of Claims 1 and 3. Since the Mushiage et al. reference does not teach all of the limitations recited in Claims 1 and 3, the Applicants respectfully submit that the Mushiage et al. reference does not anticipate Claims 1 and 3. Accordingly, the Applicants respectfully request the withdrawal of the art

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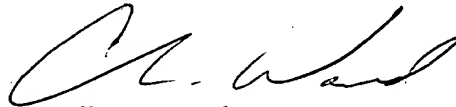
rejections of Claims 1 and 3.

Claims 2, 5, and 6 are considered allowable for the reasons advanced for the claims from which they depend.

Consequently, in view of the above discussion, it is respectfully submitted that the present application is in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully Submitted,

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